

A CASE OF DOUBLE CONSCIOUSNESS.

By ALBERT WILSON, M.D.

THIS remarkable case of double consciousness was under my constant observation for about four years.

It involved chiefly mental phenomena, and though I could find no evidence by any physical signs of alternating action of the two halves of the brain, yet the status should be kept in view by experts in determining a possible causation for these events.

For the purposes of classification I will call her normal self A and her abnormal condition B, subdividing it into B 1 to B 12, as she exhibited not merely one abnormal state but more than a dozen such sub-stages.

At the beginning of her illness the abnormal appeared for short periods, from a few minutes to an hour; but as time went on the normal decreased in time and frequency, occurring only for two or three minutes, and at intervals of days, until it has finally completely vanished, and she has now been living in the abnormal condition for years, making her own way in the world.

There are three conditions about these several abnormal sub-stages which are constant, and should be kept in view throughout the history:

1. Each sub-stage appears and disappears at quite irregular intervals.
2. Each sub-stage has its own special characteristics.
3. Each sub-stage is continuous with itself,—that is, when any particular sub-stage appears it commences where the previous attack of the same sub-stage left off. Therefore any particular sub-stage has its memories limited to its own events,

and knows nothing of the life or incidents of any other sub-stage. Each sub-stage or personality is, then, complete in itself.

But the abnormal had a faint glimmer of the normal. Perhaps this might be aided by overhearing conversation about herself. In the normal, however, she was absolutely ignorant of what happened in the abnormal. This applies also to physical suffering, for in one abnormal stage she was liable to toothache, and if she returned to the normal the toothache likewise disappeared.

These separate personalities were "switched" on and off without apparent rhyme or reason. Yet there was always some physical disturbance. It might be pallor and exhaustion of passing duration, or she might fall off a chair, becoming cataleptic or paralysed in the legs, or there might be loss of consciousness approaching coma. There never were epileptic fits, though about three times she had convulsions, and once or twice complete coma.

Among the varying personalities, there was to begin with more or less complete loss of all previous knowledge; whilst her character or Ego was much modified. Thus she might become an amiable child, or cruel and wicked, or a hopeless imbecile, blind and paralysed, a deaf mute, a maniac, or finally lose all sense of moral tone and responsibility, either to thieve or even to try to kill.

The patient was a bright, intelligent girl twelve and a half years of age at Easter, 1895, when first taken ill with influenza. There is no history to record except that there was great trouble shortly before her birth, when the home had to be broken up.

Though the influenza passed off in a week, yet she was left with an attack of meningitis, and remained in a serious condition for six weeks. There was a high temperature, intense headache aggravated by light and sound, and great weakness. In the third week she was delirious and maniacal. She had intense fear, chiefly of imaginary snakes. During the attacks, though so weak, she developed great strength. She was ravenous for oranges, and this detail indicated later that this was the first of the abnormal personalities. She was mentally blind in that she could not recognise people, yet a hand or any crease in the counterpane became to her a snake. In the fourth week fits occurred; first choreiform jerkings, then opis-

thotonos with lividity followed by coma. These fits would occur ten to twenty times a day. In the fifth week recovery set in and intelligence returned. In the sixth week catalepsy developed with paralysis of the legs, and quite suddenly she developed this double consciousness. It occurred in this way. Whilst in bed reading or playing with her dolls she would commence shaking, and clear a space around. Then she would say, "It is coming," turn a somersault, and sit up on the bed in this new personality. Often she would call out "Holloa" as if unexpectedly greeting those around her. Her facial expression was altered; it became childish. She also clipped her words like baby talk. She did not know the names of things. If asked about her legs she would say, "What dat?" "What legs mean?" and if touched would say, "What? dese sings legs?" and so on. On the other hand, if one touched her nose she might call it her ear; so that she had a store of words, only not the proper associations. She also reversed qualities, calling white, black; black, white; red, green; and so on. When asked to read, she would misname letters, or call them alternately N and O; but she learns quickly. As to writing, she can copy, but cannot write to dictation, as if some word-deafness. She always writes backwards; not mirror writing, but commencing at the tail of the last letter of a word. She applies nicknames to her family and friends, but this had happened for two or three days before the first somersault, when she showed a gradual change in her whole manner. Thus she called her father "The Tom" or Tom, her mother "The Mary Ann," the nurse "The Susan Jane," her sister F. "The gigger," her sister A. "Sally," her brother F. "George," Dr. H—"The Jim," Dr. T—"The Sam," and others. During the attack she says she is "a thing" and not a girl, and she refuses her proper name. Using her correct name, she says she is very cross with that person for going and leaving her. She also says she hates that person, for every one likes that person but does not like her, meaning in her present abnormal state. So the abnormal B has some conception of the normal A; but when the normal A returns she knows nothing of B the abnormal, yet knows that there is some sort of attack which she describes as "going to sleep," and says she feels as if she were dying. There is inability to stand, but she can move her feet and crawl. Cataleptic attacks occur. Sometimes she is

drawn up like a ball, so that one can lift her *en masse* by one limb. They last about ten minutes, and any sudden noise or start will bring them on. It was not until July 20th, 1895, that I saw her in her normal state. She suddenly changed to the normal, and was very modest and well-behaved for a child of her age. In the abnormal she was noisy and very familiar in her manner. She told me she knew nothing of these attacks, and she said she had not seen me before. This is very remarkable, for I had seen her nearly every day for ten weeks, and she had heard my voice, so that in her abnormal condition she and I were very old friends. In about five minutes she changed back to the abnormal. She put on a very annoyed expression, pouting and frowning. In a minute her features relaxed, she smiled, and began chatting in her usual way.

I have kept a chronological record of the various sub-stages, which would fill a small volume; but I propose only to deal with the chief sub-stages, leaving out five or six which were ill-defined. As a rule she gave herself a name in each sub-stage, or, if not, we suggested one. Thus in the last described she was called "a thing." We have now seen two sub-stages:

B 1, the mania, with fear of snakes and great thirst.

B 2, "a thing."

Whilst admitting the intricacy and dense obscurity of this and similar cases, yet I wish to advance a theory for consideration. It seems to me poor fun to label this hystero-epilepsy and toss it aside, shutting one's eyes to the vast issues which such a case raises in our social economy, especially in the question of the day, Individual Responsibility, whether viewed from the legal or the moral aspect. I think the tendency of to-day is to regard hysteria and its many manifestations as a disease of the sympathetic system. We all know the patches of flushing that occur on the face and neck of certain persons; while in opposition to the local hyperæmias we have local anæmias and lividities as in Raynaud's disease, chilblains, so-called "dead fingers," and allied diseases. We have also local hyperæsthesia and local anæsthesia.

Are not all of them dependent on vaso-motor changes? These we might term the coarse manifestation of disturbance in the sympathetic system. If we instead apply the same vaso-motor changes to the delicate cortex of the brain, must we

not be prepared to find aberrations from the normal brain functions?

There is exaggerated ideation and motor explosion in cases of cortical hyperæmia or congestion. Such might be the case here during the maniacal attacks B 1. But where loss of memory occurs as in the B 2 sub-stage, is it not possible to conceive that the blood-supply may have been shut off in the Broca area, or part of it? The microscope reveals to us only some of the finer blood-vessels and capillaries of the cortex, but it has not yet shown us the most delicate system of channels which bathe the individual cells and fibres in lymph or serum. The spasm of one arteriole which we can see may curtail functions in a group or layer of cells or association fibres with very surprising results. Nor have we as yet traced the terminals of the sympathetic vaso-motor fibres in the cortex. Yet the same must exist; Nature would never leave her work imperfect. Therefore, while we must not dogmatise, yet we may speculate, and speculate with reason on an unknown physical condition which may have a vast influence on psychical phenomena.

B 3, or the third abnormal personality, was called "Old Nick," and was a very frequent and prolonged visitor. It first appeared on July 24th, 1895, two months after B 2 ("a thing") had occurred. B 3 ("Old Nick") stayed till August 8th and then disappeared for a year, returning July 12th, 1896, when it stayed for ten weeks. "Old Nick" had a very violent temper, but was always very sorry afterwards and said, "It is a naughty man that comes." "Old Nick" could as a rule walk, and could read and write from the first, so there was not the same amnesia for names and objects as in B 2. "Old Nick" also had the best health of any of the personalities, which perhaps throws a side-light on the etiology of neurasthenia.

The following incidents illustrate some of the special features of the case:—Whilst in this "Old Nick" state the patient's mother was ill in bed. The patient attended carefully to her mother, whom she styled "Mary Ann." One day she returned suddenly to the normal, and was both surprised and distressed to find her mother ill; and could not understand it, for her mental association was with the last normal period when her mother was up and in good health. The patient had several times been at the sea-side, but when taken in this B 3 stage to Maldon it all came as a new and surprising experience. She

returned normal once or twice, and in a particular road, so her father conceived the idea of calling her persistently by name when she walked down this road. She would then return to normal, and after some time as soon as she entered that road she would, without any aid, return to her normal state, passing back to "Old Nick" when leaving it. The day after coming home, having been "Old Nick" on the journey, she returned to normal, and was very puzzled to explain her arrival, being unconscious of the journey.

The following event illustrates the continuity of the sub-stages:—On Sunday, September 20th, 1896, "Old Nick" left about 2 p.m. in the middle of her dinner. She stopped eating and fell off her chair dazed; when this passed off she had changed to another sub-stage. "Old Nick" next returned on a Sunday, April 4th, 1897, about the same time, that is during the dinner-hour. She was ill in bed in an imbecile state when she suddenly called to her sister, "What am I in bed for? I am quite well. You have been quick in getting my nightgown on me. Don't you know me? I am Nick." She smelt the dinner and asked to go down and finish her dinner, thinking it was the same dinner she had left on September 20th.

B 4 was a deaf mute, and first appeared on August 8th, 1895, at the end of "Old Nick's" first visit. It returned five times during the illness, for a few days only at a time. It comes and goes quite suddenly. She makes her thoughts known by writing.

This brain area ought to be easily localised—namely, the centre of speech and hearing with their association fibres. Arterial spasm or anæmia of these convolutions might explain the phenomenon.

B 5 was a personality which only came once and lasted about three weeks. It arrived on December 1st, 1895. In this sub-stage she says she was only three days old, and knew no one at first. She understands everything in the house, and is very good in helping her mother. She writes in the ordinary way, but if asked to spell a word does so backwards. She complains of pain in the left temporal and parietal regions.

B 1 arrived again on December 20th, 1895, when the last sub-stage disappeared. This I described as occurring in the third week of the illness. The features were violent mania, fear of snakes, great thirst and craving for oranges and lemonade, and headache; in fact, she was constantly asking for

the water coil she formerly had for her head. This sub-stage and B 2 ("a thing") alternated until the beginning of March, 1896.

B 6 was a personality very like B 2 ("a thing"), but was gentler, more modest, and more refined. It appeared first on May 6th, 1896, and became a very constant visitor; in fact, she is now living in this sub-stage and supporting her own livelihood. The normal personality A was now a rare visitor, perhaps not appearing for a week or more, and possibly for only three or four minutes at a time.

B 6 we named "Good thing," or "Good creature," or "Pretty dear." It was not the same person as B 2 ("a thing"), because while "a thing" had now learned to read and write "Good creature" could not do so, and had to be taught. B 6 was more intelligent than any of the others, and learned French. A striking feature is that no other personality could understand French. B 6 also replaced B 2, which till now had been the common visitor.

Another instance of continuity of the different sub-stages was shown in the following circumstance:—B 6 ("Good creature") suddenly left at 9 p.m. on December 29th, 1896, returning on the evening of May 13th, 1897, and was excited and disturbed because she could not explain her surroundings. She had jumped suddenly from December to May, from winter to early summer. She asked how the cut flowers were there, as it was winter according to her memory, and being lamp-light she could not estimate the season.

On this occasion in May she changed from "Old Nick" to "Good creature" at about nine in the evening, and returned back to "Old Nick" in daylight on July 1st. She was again much disturbed to find it was daylight, for when she was last "Old Nick" the lamp was lit, and her father, whom she called "Tom," sitting beside her having his tea. She expected to see him, whereas he was in the City.

A more remarkable illustration is found in connection with her two visits to the sea-side. In August, 1896, she went as B 3 or "Old Nick" and bathed and learnt to swim. In 1898, two years later, she visited the same place as B 6 or "Good creature;" she then was quite ignorant of the place, and had no memory of being there before, nor having bathed. Two letters written to me, one at each visit, illustrate this conclusively.

B 7 named herself "Adjuica Uneza," and came suddenly in May, 1896, and stayed for about a fortnight. She could not walk, and at first was very dazed. She had a remarkable memory for the small events of her childhood up to the date of her influenza, but she knows nothing that has happened since. Her memory of events which happened when she was between two and three years of age was very remarkable. As it has been shown by Bolton that the more superficial layers of small pyramidal cells of the cortex develop later than the deeper layers of larger pyramids, is it possible that the deep pyramidal layers were now called into activity by some stimulation, vascular or otherwise?

It commends itself to common sense that the deeper layers precede the more external and superficial in development and evolution. The converse I have seen in the brain of an alcoholic wreck, with mental enfeeblement and degeneration even of the lower nervous system. In this case the superficial layer of small pyramids was distinctly atrophied. The association fibres did not show a corresponding amount of degeneration and disappearance as if they were hitched on to deeper strata of cells. The point that I wish to raise is that the vasomotor changes would first affect these more distant cortical areas rather than the deeper strata, producing more psychic disturbance.

A sharp line of demarcation caused by the influenza and meningitis shut off the more superficial and external layer of developing pyramids with its mental pictures and memories. We may regard these higher psychic areas as damaged, for we see the ravages of meningitis, especially among the children of the poor. While many appear to recover and grow up to adult life, may not their whole personality be altered, as in this case? How many criminals and lunatics are handicapped in this way from childhood! The law, while keen for justice, is aptly personified as blind to mercy. Is it not for our profession to collect evidence which might lead to a better protection for society and a different principle on which to deal with the ever-multiplying criminal population?

B 8 was a short-lived personality, lasting only four days. On June 20th, 1896, she had convulsions, and was very lost. The following morning she knew no one, and said she was only born last night, so how could she know anything? However,

she could read. Perhaps this is more a confusional or lost condition, post-epileptic. Still she was quite ignorant both of her normal self (A) or of any other sub-stage.

B 9 was, however, a most important sub-stage and a very persistent visitor. In this she was imbecile, blind, and at times deaf, and usually paralysed in the feet. The striking feature in this case is that when blind she could draw, while at no other period of her life, either normal or abnormal, had she any ability in drawing. Is not this some ancestral devolution or throw-back? She would call out for "picters" and "pencil," and set to work drawing the fashions which one sees in the illustrated papers. She was guided entirely by touch. We proved this by moving the paper when she was not touching it. She at once discovered the error and commenced feeling for the pencil marks, resuming the drawing in a correct manner. I also proved the blindness by holding a book between her eyes and the paper. Her eyes were, however, normal, and Mr. Tweedy kindly confirmed this opinion. Once or twice when examining the retina, the stimulation of the light brought her to the normal condition. In this state she was a pitiable object, the vacant face expressionless, the eyes protruding as if the ocular muscles were paralysed, and the pupils widely dilated. Usually she understood nothing, and there often seemed no way of communicating with her. Sometimes for hours she would roll beads on a tray; at other times she wrote verses from memory, or the names of persons she knew; or she would copy, only in this she was guided by touch and not by sight. This seemed the most remarkable feature in the whole case. To what was the blindness due? It appeared to be organic, all the ocular apparatus paralysed. The calcarine area would probably escape. Dr. Bolton has shown this to be the visual area, in the sense of the recording sensitised plate, but here there was no psychic blindness, for her visual ideation persisted. It was the photographic apparatus which was disorganised. In seeking an explanation, there may have been paralysis of the roots of the second, third, and fourth, ciliary portions of the fifth and sixth nerves. Perhaps all was connected with superactivity of the cervical sympathetic, shutting off vascular supply in these ocular districts which must be connected. Other opinions might incline to a paralysis of Bolton's visual area.

Was the imbecility due to the blindness, or did it coincide, due to a shutting off of higher psychic centres, as the pre-frontal? How, also, can we account for the extra keenness of touch and hearing, as with those who are blind for years? This mental darkness lasted for three to four weeks from December 29th, 1896; but she returned suddenly to the normal on two occasions. On January 3rd, 1897, she suddenly regained her sight and became her normal self for about two minutes. She was quite her ordinary self, and called to her sister, "I can see you," and asked some questions. On January 17th she also returned three or four times to the normal, and told her mother she felt quite well, but sometimes felt "to be dying and to go right away." When the normal state occurs she can walk. I tried to rouse her out of this imbecility by beating a tea tray with a key; but she took absolutely no notice, though the noise was deafening and unmusical in the extreme. As time progressed her intelligence improved a little; she began to know people and things at more lucid intervals.

At the end of January she had some vision, but was short-sighted. She could discern colour and pictures four inches off, but could not see about the room. This we proved by testing her in various ways when she was able to walk and grope about. Her hearing became very acute, compensatory for the more or less complete blindness.

B 10 was a sub-stage showing decided moral degeneracy. She herself was so conscious of her wickedness that she named herself "The dreadful wicked creature." She was violent and cruel, bullying her little sister, and on one occasion would have forced her into the fire if help had not arrived. Does not this case throw a side-light on the dangerous criminal? Are not the more rudimentary brain cells, which have to do with the lower animal functions, let loose in fury and without control or guidance? To what extent, then, are such responsible? Ought not the State to care for uncontrollable unhealthy beings the same as for lunatics?

Another moral delinquency was shown in the sub-stage B 11, but of a more harmless type. This sub-stage was rather mixed. She could walk, and resembled B 2 in that she wrote and spelt backwards, but also resembled B 6 in that she understood French. Her chief characteristic was that she was bent on

stealing, and defended it partly on so-called Socialistic principles. Thus she argued, "If people don't give you things, why, nick them. Quite right too, if you are not found out." She also carried her object into practice, and one day took an orange from a shop door, but seeing a policeman approach went back and replaced it and made off. Here is exhibited also the protective instinct after the act.

I stated before that pain might occur in one sub-stage and be absent in the normal. This was demonstrated in the case of toothache. Whilst in B 2 sub-stage ("a thing") she had a good deal of toothache. It always disappeared when she became normal. On one occasion we gave her chloroform during B 2 stage and extracted the tooth. She was very unwilling at first, but most pleased to be free from the pain afterwards. Her father coaxed her to the normal state (A), and this lasted for ten minutes. She at once detected the gap and the blood, and was quite surprised, and asked how it was she never felt any pain or knew anything of the chloroform.

A nerve specialist, the late Dr. Althaus, witnessed this performance, and was greatly interested in it. About a year later, when B 3, or "Old Nick," she again had toothache, but the toothache left her if she went into any other condition.

Another illustration of the isolation of different sub-stages was shown by the following occurrence:—Once, whilst showing me a toy wigwam which had been given to her in the B 3 or "Old Nick" stage, she being then in that state, she suddenly dropped the toy and passed into a new stage, a variation of "Good thing" or "Good creature" (B 6). In this new personality she commenced talking, but could not be induced to take any interest in the wigwam, which she declared she had never seen or handled before. As soon as she returned to B 3 she resumed her interest in the toy.

Another minor detail bearing on the same point was that some sub-stages feared thunder, others did not, and so on. When she grew up to be about sixteen, the normal stage (A) had practically gone for ever. She was sometimes B 3 ("a thing"), but more usually B 6 ("good creature"), a very nice docile child. I instructed the parents as to careful training, and they had broken the habit of baby talk and the forward free manner which belonged to almost every abnormal personality. They also called her by her proper name, and she would say, "I sup-

pose such is my proper name;" "I know I have been ill and done funny things, I have been told about it." Her general health had all through been attended to, and when crippled she rode in a bath-chair. She was by no means helpless or stupid. Often in these abnormal states she did errands and made calls, or went to church alone. Menstruation, which was irregular at first, never made the slightest difference so far as we could detail.

When about seventeen she developed another modification, perhaps a personality, B 12; in it she was very self-willed, and would not listen to her parents. She had a great affinity for the opposite sex. She announced that she wanted a young man and would have one. She carried her point, leading the attack. However, by careful supervision and tact all went well. Perhaps this may not be considered an abnormal stage, but the uncloaking of the normal. This difficult stage of affection for the opposite sex seemed to be paroxysmal, and fused into B 6 or "Good creature." It did not persist. As B 6 or "Good creature" she gradually took her place as an ordinary individual. No one would suspect any alteration, yet one who knew her can see that the original Ego, the sum of personalities, is gone.

This case would suggest that whereas heredity and ancestry form the basis of mind and modify the type, experience and education form the superstructure. Education and experience must equip various groups or districts of cells and association centres. The more groups so developed, the higher the state of memory and intellect. Thus each life, or the true Ego, is made up of so many active mental centres or personalities, some good and some bad according to circumstances, inherited or acquired. Where the binding cement is weak, we get the mentally unstable as here, and this opens the very serious question which constantly affronts us—that of Responsibility.

Résumé of Sub-stages.

- B 1. Mania, fear, thirst. Rare visitor.
- B 2. "A thing." Writes backwards, amnesia, childish, catalepsy.
- B 3. Often paralysis of legs, ignorant. Very constant visitor for the first year.
- B 3. "Old Nick." Bad temper, can read and write. The best

health of any of the sub-stages. Frequent visitor for three years.

B 4. Deaf mute. Made five short visits.

B 5. "Only three days old." Came once.

B 6. "Good thing" or "Good creature." Like B 2, but more refined and more intelligent. Had, however, to learn reading and writing afresh. She learned French, and was the only one who did so. Gradually replaced B 2, and after two to three years became permanent.

B 7. "Adjuica Uneza." Only came once. The features are a remarkable memory for the events of her life previous to this illness, extending back to when she was two years old.

B 8. One visit for four days. "Only born last night." Mentally blank.

B 9. Imbecile, blind, sometimes deaf, and motor paralysis; could draw beautifully, the only time in her life.

B 10. Moral degeneracy. Cruelty and violence.

B 11. Allied to B 2 and B 6. Tendency to steal and Socialism.

B 12. In adolescence. Fond of the opposite sex. Self-willed. Resented control.

3

1773-1774







